IN THE DRAWINGS:

Each of Figures, 2, 3, 4, 5 and 6 has been amended as shown on the replacement sheets attached hereto.

REMARKS

Applicants note with appreciation the telephone interview courteously afforded the undersigned representative of the Applicants on January 13, 2009. The following topics were discussed in the interview.

In the October 14, 2008 Office Action, the drawings were objected to under 37 C.F.R. §1.83(a) because the Examiner stated the drawings must show the estimation that is connected between the input device and the feedback reduction device. As explained in the specification as originally filed, the estimation unit includes the two filters 6 and 7 and the two feature extractors 8 and 9. Such an estimation unit has therefore been indicated in dashed lines in each of Figures 2, 3, 4, 5 and 6, and the written portion of the specification has been editorially amended to identify the estimation unit with reference numeral 13. Since the estimation unit is clearly identified in the specification as originally filed, no new matter is added thereby.

These drawing changes were previously submitted in a response to the October 14, 2008 Office Action that Applicants filed on January 14, 2009. In an Advisory Action dated January 21, 2009, entry of that Amendment was refused, in part on the basis that the Examiner stated the drawing changes are not consistent with the original specification, because the Examiner stated the original specification states that the estimation unit comprises the high-pass filter 6 and the low-pass filter 7, in paragraph [0016]. The Examiner therefore stated these drawing changes constitute new matter.

In response, Applicants acknowledge that paragraph [0016] of the original specification reads as noted by the Examiner, but it is clear from the overall content

of that description that Applicants were not stating that the estimation unit *only* comprises the filters 6 and 7. The extensive discussion of the feature extraction units that follows the statement noted by the Examiner makes clear that all of the components enclosed in the dashed lines in the revised figures submitted herewith are considered by the Applicants as forming the "estimation unit." This is also made clear by the claims as originally filed. As the Examiner is aware, the original claims filed with an application are a part of the original disclosure of that application. Original dependent claim 2 of the present application stated that the estimation device is configured to generate an estimated signal for the second signal portion utilizing a model. Since the feature extraction block 9 is the only component that is shown in Figures 2-6 as being connected to the model 10, this necessarily means that the feature extraction block 9 must be a part of the estimation device. This is made explicit in dependent claim 4, wherein it could not be more clearly stated that the estimation device comprises the feature extraction blocks 8 and 9.

Since the claims are a part of the original disclosure, the written portion of the specification and the drawings have now simply been made to conform to the claims as originally filed. The drawing changes and the changes to the specification thus do not constitute new matter, and entry of these changes is respectfully requested.

Claims 15 and 22 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement, because the Examiner stated that the specification does not clearly disclose how the system distance is derived from the loop gain and the predetermined stability limit of the feedback loop. The same comment was made with regard to claim 22. In fact, the term "system distance" is a well-known and commonly used term in the field of hearing aid devices, and is also

used in the Kates et al. reference relied upon by the Examiner in the same manner as it is used in the present specification. In the present specification, the system distance is explicitly defined in paragraph [0009] in exactly the same manner as it is defined in the last claim element of each of claims 15 and 22. That last claim element in each of those claims refers to the "loop gain," which is explicitly defined in each of those claims earlier as being a gain that changes dependent on the amplification gain provided by the signal processor, which is also consistent with the definition provided in paragraph [0009].

Although not specifically called the "system distance," this characteristic is the same characteristic as is calculated in the paragraph beginning at column 14, line 55 and proceeding through column 15, line 23 in the Kates et al. reference, thereby providing further evidence that this concept is well-known and understood by those of ordinary skill in the field of hearing aid design.

Applicants therefore respectfully submit that the subject matter of claims 15 and 22 is described in the present specification in full compliance with the enablement requirement of 35 U.S.C. §112, first paragraph.

Claims 15, 19, 20 and 22 were rejected under 35 U.S.C. §102(b) as being anticipated by Kates et al. This rejection was also discussed in the telephone interview. In the telephone interview, the Examiner stated, in his opinion, claims 1 and 22 only "superficially" claim the Applicants' invention, and therefore the Examiner believes those claims are readable on the disclosure of Kates et al.

Applicants respectfully disagree and believe each of independent claims 15 and 22 includes detailed method steps or detailed structure that distinguishes each of those claims over the disclosure of the Kates et al. reference.

As discussed in the telephone interview, in the hearing device and method disclosed and claimed in the present application, a feedback reduction device is connected between the signal input device and the signal output device, and this feedback reduction device operates to adjustably reduce, compensate or damp the feedback caused by the feedback loop, by making use of at least one adjustable parameter that influences the processed signal.

Also in accordance with the invention, the aforementioned estimation unit, that is connected between the signal input device and the feedback reduction device, estimates, from the electrical input signal, an estimated value of the aforementioned system distance. Each of claims 15 and 22 explicitly states that the estimation unit supplies the estimated value to the aforementioned feedback reduction device, and the feedback reduction device generates the aforementioned parameter dependent on this estimated value.

The feedback reduction device in claims 15 and 22 can thus be considered as representing the feedback transfer function W that is used in the above-identified calculation in column 15 of the Kates et al. reference. It is true, as noted by the Examiner, that in the Kates et al. reference, this transfer function W is set to zero in order to determine the maximum gain H_{max} at all frequencies. The Kates et al. reference then states that the system will be stable if $H_{max}(MARB)I$ is less than 1, and this allows the maximum gain H_{max} to be expressed as 1/MARBI. The Kates et al. reference also states that when the hearing aid is turned on, W_0 will be equal to MARB.

Therefore, the aforementioned calculations are undertaken in the Kates et al. reference in order to determine H_{max}, but there is no teaching whatsoever in the Kates et al. reference to vary the feedback transfer function W dependent on the system distance, as explicitly claimed in each of claims 15 and 22. In the Kates et al. reference, the transfer function W can be set to different values in order to facilitate the aforementioned calculations, but this is not the same as varying the value W dependent on the estimated system distance, as disclosed and claimed in the present application.

In response to these arguments made in the previously submitted but unentered Amendment, the Examiner, in the aforementioned Advisory Action, stated that Applicants have not claimed "to vary the feedback transfer function W dependent on the system distance" nor "varying the value W dependent on the estimated system distance." The Examiner therefore stated these arguments are not persuasive.

As should be clear from the above discussion, the only reason why Applicants devoted any discussion at all to the parameter W that is disclosed in the Kates et al. reference is because it appears, from the citations to the Kates et al. reference noted by the Examiner to substantiate the rejection, the Examiner considers the transfer function W disclosed in the Kates et al. reference to correspond to the claimed "at least one adjustable parameter that influences said processed signal" that is generated, according to the language of claims 15 and 22, dependent on the estimated value. The estimated value is an estimated value of the system distance, as also explicitly claimed in claims 15 and 22.

Therefore, it is of course true that claims 15 and 22 do not claim "varying the value W dependent on the estimated system distance," because the value W is disclosed only in the Kates et al. reference and is not used in the present Applicants' disclosure or claims. Applicants were merely refuting the Examiner's contention that such a function (namely, varying the value W dependent on the system distance) occurs in the Kates et al. reference. For the reasons discussed above, this is not the case. This is therefore an extremely relevant argument with regard to the subject matter of claims 16 and 22.

Applicants therefore respectfully submit that claims 15 and 22 do not "superficially" claim the subject that Applicants regard as their invention, but in fact claim that subject matter in a manner that is sufficiently detailed so as to be distinguishable over the disclosure of the Kates et al. reference.

The Kates et al. reference, therefore, does not disclose all of the components of the hearing device of claim 15, nor all of the method steps of claim 22, as arranged and operating in those claims, and thus the Kates et al. reference does not anticipate either of those independent claims.

Claims 19 and 20 add further structure to the novel combination of claim 15, and therefore neither of claims 19 and 20 is anticipated by Kates et al., for the same reasons discussed above in connection with claim 15.

Claims 16, 18, 23 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kates et al. The above discussion is also applicable to this obviousness rejection based on Kates et al. As noted above, there is no disclosure whatsoever anywhere in the extensive specification of the Kates et al. reference to vary the value W dependent on the estimated system distance, as explicitly set forth

in each of claims 15 and 22. Therefore, there is no teaching, suggestion, guidance or motivation contained anywhere in the Kates et al. reference to modify that reference in order to undertake such an adjustment of the value W dependent on the estimated system distance. Since it would not have been obvious to modify either of claims 15 or 22 based on the teachings of Kates et al., none of claims 16, 18, 23 or 25 would have been obvious to a person of ordinary skill in the field of hearing aid design based on the disclosure of Kates et al.

Claims 17 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kates et al., in view of Kates '986. Claims 21 and 26 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kates et al. in view of Nielsen et al.

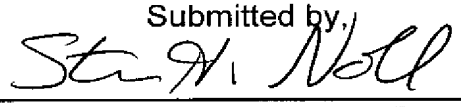
For the same reasons discussed above in connection with the Kates et al. reference, even if that reference were further modified in accordance with the teachings of either of the aforementioned secondary references, the subject matter of none of the aforementioned dependent claims would result.

All claims of the application are therefore submitted to be in condition for allowance.

The present Amendment does not raise any new issues requiring further searching or consideration, and is therefore properly enterable at this stage of prosecution, after the Final Rejection, under the provisions of 37 C.F.R. §1.116.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Submitted by,



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